

09/913770

Rec'd PCT. No 27 MAY 2003

SEQ068rev2

SEQUENCE LISTING

<110> Takeda Chemical Industries, Ltd.

<120> Novel G Protein Coupled Receptor Protein and Its DNA

<130> P2001-068US

<140> US/09/913, 770A

<141> 2001-08-17

<150> JP 11-041336

<151> 1999-02-19

<150> JP 11-125768

<151> 1999-05-06

<160> 4

<210> 1

<211> 340

<212> PRT

<213> Human

<400> 1

```

Met Asn Pro Phe His Ala Ser Cys Trp Asn Thr Ser Ala Glu Leu Leu
      5      10      15
Asn Lys Ser Trp Asn Lys Glu Phe Ala Tyr Gln Thr Ala Ser Val Val
      20      25      30
Asp Thr Val Ile Leu Pro Ser Met Ile Gly Ile Ile Cys Ser Thr Gly
      35      40      45
Leu Val Gly Asn Ile Leu Ile Val Phe Thr Ile Ile Arg Ser Arg Lys
      50      55      60
Lys Thr Val Pro Asp Ile Tyr Ile Cys Asn Leu Ala Val Ala Asp Leu
      65      70      75
Val His Ile Val Gly Met Pro Phe Leu Ile His Gln Trp Ala Arg Gly
      85      90      95
Gly Glu Trp Val Phe Gly Gly Pro Leu Cys Thr Ile Ile Thr Ser Leu
      100      105      110
Asp Thr Cys Asn Gln Phe Ala Cys Ser Ala Ile Met Thr Val Met Ser
      115      120      125
Val Asp Arg Tyr Phe Ala Leu Val Gln Pro Phe Arg Leu Thr Arg Trp
      130      135      140
Arg Thr Arg Tyr Lys Thr Ile Arg Ile Asn Leu Gly Leu Trp Ala Ala
      145      150      155
Ser Phe Ile Leu Ala Leu Pro Val Trp Val Tyr Ser Lys Val Ile Lys
      165      170      175
Phe Lys Asp Gly Val Glu Ser Cys Ala Phe Asp Leu Thr Ser Pro Asp
      180      185      190
Asp Val Leu Trp Tyr Thr Leu Tyr Leu Thr Ile Thr Thr Phe Phe Phe
      195      200      205
Pro Leu Pro Leu Ile Leu Val Cys Tyr Ile Leu Ile Leu Cys Tyr Thr
      210      215      220
Trp Glu Met Tyr Gln Gln Asn Lys Asp Ala Arg Cys Cys Asn Pro Ser
      225      230      235
Val Pro Lys Gln Arg Val Met Lys Leu Thr Lys Met Val Leu Val Leu
      245      250      255
Val Val Val Phe Ile Leu Ser Ala Ala Pro Tyr His Val Ile Gln Leu
      260      265      270
Val Asn Leu Gln Met Glu Gln Pro Thr Leu Ala Phe Tyr Val Gly Tyr
      275      280      285
Tyr Leu Ser Ile Cys Leu Ser Tyr Ala Ser Ser Ser Ile Asn Pro Phe
      290      295      300
Leu Tyr Ile Leu Leu Ser Gly Asn Phe Gln Lys Arg Leu Pro Gln Ile
      305      310      315
Gln Arg Arg Ala Thr Glu Lys Glu Ile Asn Asn Met Gly Asn Thr Leu
      325      330      335
Lys Ser His Phe
      340

```

<210> 2

<211> 1023

<212> DNA

<213> Human

SEQ068rev2

<400> 2

atgaatccat	ttcatgcatc	ttgttggaa	acctctgccg	aactttttaa	caaatcctgg	60
aaataaagagt	ttgcttatca	aactgccagt	gtggtagata	cagtcacctt	cccttccatg	120
attgggatta	tctgttcaac	agggctgggt	ggcaacatcc	tcatgtat	cactataata	180
agatccagga	aaaaaacagt	ccctgacatc	tatactgca	acctggctgt	ggctgatttg	240
gtccacatag	ttggaatgcc	ttttcttatt	caccaatggg	cccagggggg	agagtgggtg	300
tttggggggc	ctctctgcac	catcatcaca	tccctggata	cttgtaacca	atttgcctgt	360
agtgccatca	tgactgtaat	gagtgtggac	aggtactttg	ccctcgtcca	accatttcga	420
ctgacacgtt	ggagaacaag	gtacaagacc	atccggatca	atttgggcct	ttgggcagct	480
tcctttatcc	tggcattgcc	tgtctgggtc	tactcgaagg	tcatcaaat	taaagacggt	540
gttgagagtt	gtgcttttga	tttgacatcc	cctgacgatg	tactctggta	tacactttat	600
ttgacgataa	caactttttt	tttccctcta	cccttgattt	tgggtgtgcta	tattttaatt	660
ttatgctata	cttgggagat	gtatcaacag	aataaggatg	ccagatgctg	caatcccagt	720
gtacaaaaac	agagagtgat	gaagtggaca	aagatgggtc	tgggtgctgt	gtagtcttt	780
atcctgagtg	ctgcccctta	tcatgtgata	caactgggtga	acttacagat	ggaacagccc	840
acactggcct	tctatgtggg	ttattaccct	tccatcgtc	tcagctatgc	cagcagcagc	900
attaaccctt	ttctctacat	cctgctgagt	ggaaatttcc	agaaacgtct	gcctcaaatc	960
caaagaagag	cgactgagaa	ggaaatcaac	aatatgggaa	acactctgaa	atcacacttt	1020
tag						1023

<210> 3

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 3

atgaatccat	ttcatgcatc	ttgt	24
------------	------------	------	----

<210> 4

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 4

ctaaaagtgt	gatttcagag	tgttt	25
------------	------------	-------	----

SEQUENCE LISTING

<110> Takeda Chemical Industries, Ltd.

<120> Novel G Protein Coupled Receptor Protein and Its DNA

<130> P2001-068US

<140> US/09/913, 770A

<141> 2001-08-17

<150> JP 11-041336

<151> 1999-02-19

<150> JP 11-125768

<151> 1999-05-06

<160> 4

<210> 1

<211> 340

<212> PRT

<213> Human

<400> 1

```

Met Asn Pro Phe His Ala Ser Cys Trp Asn Thr Ser Ala Glu Leu Leu
      5      10      15
Asn Lys Ser Trp Asn Lys Glu Phe Ala Tyr Gln Thr Ala Ser Val Val
      20      25      30
Asp Thr Val Ile Leu Pro Ser Met Ile Gly Ile Ile Cys Ser Thr Gly
      35      40      45
Leu Val Gly Asn Ile Leu Ile Val Phe Thr Ile Ile Arg Ser Arg Lys
      50      55      60
Lys Thr Val Pro Asp Ile Tyr Ile Cys Asn Leu Ala Val Ala Asp Leu
      65      70      75
Val His Ile Val Gly Met Pro Phe Leu Ile His Gln Trp Ala Arg Gly
      85      90      95
Gly Glu Trp Val Phe Gly Gly Pro Leu Cys Thr Ile Ile Thr Ser Leu
      100      105      110
Asp Thr Cys Asn Gln Phe Ala Cys Ser Ala Ile Met Thr Val Met Ser
      115      120      125
Val Asp Arg Tyr Phe Ala Leu Val Gln Pro Phe Arg Leu Thr Arg Trp
      130      135      140
Arg Thr Arg Tyr Lys Thr Ile Arg Ile Asn Leu Gly Leu Trp Ala Ala
      145      150      155
Ser Phe Ile Leu Ala Leu Pro Val Trp Val Tyr Ser Lys Val Ile Lys
      160      165      170
Phe Lys Asp Gly Val Glu Ser Cys Ala Phe Asp Leu Thr Ser Pro Asp
      175      180      185
Asp Val Leu Trp Tyr Thr Leu Tyr Leu Thr Ile Thr Thr Phe Phe Phe
      190      195      200
Pro Leu Pro Leu Ile Leu Val Cys Tyr Ile Leu Ile Leu Cys Tyr Thr
      205      210      215
Trp Glu Met Tyr Gln Gln Asn Lys Asp Ala Arg Cys Cys Asn Pro Ser
      220      225      230
Val Pro Lys Gln Arg Val Met Lys Leu Thr Lys Met Val Leu Val Leu
      235      240      245
Val Val Val Phe Ile Leu Ser Ala Ala Pro Tyr His Val Ile Gln Leu
      250      255      260
Val Asn Leu Gln Met Glu Gln Pro Thr Leu Ala Phe Tyr Val Gly Tyr
      265      270      275
Tyr Leu Ser Ile Cys Leu Ser Tyr Ala Ser Ser Ser Ile Asn Pro Phe
      280      285      290
Leu Tyr Ile Leu Leu Ser Gly Asn Phe Gln Lys Arg Leu Pro Gln Ile
      295      300      305
Gln Arg Arg Ala Thr Glu Lys Glu Ile Asn Asn Met Gly Asn Thr Leu
      310      315      320
Lys Ser His Phe
      325      330      335
      340

```

<210> 2

<211> 1023

<212> DNA

<213> Human

SEQ068rev2

<400> 2

atgaatccat	ttcatgcatc	ttgttggaa	acctctgccg	aacttttaaa	caaatcctgg	60
aataaagagt	ttgcttatca	aactgccagt	gtggtagata	cagtcacctc	cccttccatg	120
attgggatta	tctgttcaac	agggctggtt	ggcaacatcc	tcattgtatt	cactataata	180
agatccagga	aaaaaacagt	ccctgacatc	tatatctgca	acctggctgt	ggctgatttg	240
gtccacatag	ttggaatgcc	tttcttatt	caccaatggg	cccagggggg	agagtgggig	300
tttggggggc	ctctctgcac	catcatcaca	tccctggata	cittgtaacca	atttgcctgt	360
agtgcacatc	tgactgtaat	gagtggtggc	aggtaacttt	ccctcgtcca	accatttcga	420
ctgacacggt	ggagaacaag	gtacaagacc	atccggatca	atttgggcct	ttgggcagct	480
tcctttatcc	tggcattgcc	tgtctgggtc	tactcgaagg	tcatacaaat	taaagacggt	540
gttgagagtt	gtgcttttga	tttgacatcc	cctgacgatg	tactctggta	tacactttat	600
ttgacgataa	caactttttt	tttccctcta	cccttgattt	tgggtgtgcta	tattttaatt	660
ttatgctata	cittgggagat	gtatcaacag	aataaggatg	ccagatgctg	caatcccagt	720
gtacaaaaac	agagagtgat	gaagtggaca	aagatgggtc	tgggtcgtgt	ggtagtcttt	780
atcctgagtg	ctgcccctta	tcatgtgata	caactgggtg	acttacagat	ggaacagccc	840
acactggcct	tctatgtggg	ttattaccct	tccatctgtc	tcagctatgc	cagcagcagc	900
attaaccctt	ttctctacat	cctgctgagt	ggaaatttcc	agaaacgtct	gcctcaaata	960
caaagaagag	cgactgagaa	ggaaatcaac	aatatgggaa	acactctgaa	atcacacttt	1020
tag						1023

<210> 3

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 3

atgaatccat	ttcatgcatc	ttgt	24
------------	------------	------	----

<210> 4

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 4

ctaaaagtgt	gatttcagag	tggtt	25
------------	------------	-------	----